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Case Study

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CLASSICAL AYURVEDIC MANAGEMENT OF JUVENILE IDIOPATHIC ARTHRITIS: A CASE STUDY

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ABSTRACT

Juvenile idiopathic arthritis (JIA) is the most common form of childhood arthritis that causes joint inflammation and stiffness for more than six weeks in a child aged 16 or younger. The symptoms of disease *Amavata* in *Ayurvedic classics* have similarity with rheumatism as well as JIA in paediatric age group which is characterized by *Angamarda* (body pain), *Aruchi* (loss of taste), *Thrishna* (thrist), *Gourava* (heaviness), *Klama* (tiredness without doing work), *Apaka* (indigestion) and fever. In the later stage pain may begin to migrate from place to place with a *Vrishchika Damshavat Vedana* (intense stinging type of pain) and burning sensation. This case is the retrospective observation study of this condition in one male patient aged 16 years was admitted in paediatric ward with Reg. no.-3721 with

complaints of morning stiffness, pain and swelling in the joint and patient receiving *Ayurvedic* treatment in Paediatric ward of Punjab Ayurveda Medical College & Hospital Morjand Khari, Sri Ganganagar. Despite vast range of nonsteroidal anti-inflammatory drugs (NSAIDs), immunosuppressive agents, corticosteroids etc., the complete remission of this disease is still not possible. The Patient was managed with *Panchakarma* procedures like *Baluka Swedana* and *Vaitarana Basti* for 30 days along with *Shamana Aushadhi*. These combined therapies gave moderate improvement in all the symptoms with improvement in reduced physical activity.

KEYWORDS: Amavata, Juvenile Idiopathic Arthritis, Vaitarana Basti.

INTRODUCTION

Juvenile idiopathic arthritis (JIA) is the most common form of childhood arthritis that causes joint inflammation and stiffness for more than six weeks in a child aged 16 or younger. The symptoms of disease *Amavata* in *Ayurvedic classics* have similarity with rheumatism as well as JIA.^[1] In paediatric age group which is characterized by *Angamarda* (body pain), *Aruchi* (loss of taste), *Thrishna* (thrist), *Gourava* (heaviness), *Klama* (tiredness without doing work), *Apaka* (indigestion) and fever. In the later stage pain may begin to migrate from place to place with a *Vrishchika Damshavat Vedana* (intense stinging type of pain) and burning sensation. *Amavata* is one of the commonest disorders caused by the impairment of *Agni*, formation of *Ama* and vitiation of *Vata*.^[2] Management of JIA includes use of analgesics, steroids for the pain management which are having several adverse reactions and drug dependency.^[3] Despite vast range of nonsteroidal anti-inflammatory drugs (NSAIDs), immunosuppressive agents, corticosteroids etc., the complete remission of this disease is still not possible. In *Ayurveda* according to our classics *Langhana* (light diet or fasting), *Deepana Pachana* (Appetizers, Digestives and Carminatives) and *Samshodhana* (Different Purifications) are suggested.

CASE REPORT

Basic information of the patient

Reg. No.-3721

Age: 16 years

Sex: Male

Religion: Hindu

Socioeconomic status: Middle class.

Parent's occupation: Father is farmer and mother is house wife.

Chief complaints

Morning stiffness

Pain in the knee, elbow and wrist joints

Swelling in the knee and elbow joints



since 4 Years.

History of present illnesses

Patient developed pain in right ankle joint 4 years back, after a month the left ankle also affected.

After some days both knee joints, elbow joints, wrist joints also affected and after 6 months small joints are also involved. Gradually developed morning stiffness, severe pain and swelling all over joints. Patients was tacking allopathic treatment for above symptoms but did not get any significant relief so he came in balrog Indoor Patient Paediatric ward of Punjab Ayurveda Medical College & Hospital Morjand Khari, Sri Ganganagar for further management.

History of past illness

Not specific.

Treatment history

The child was on NSAIDs and corticosteroids.

Family history

No family history.

History of immunization

Up to date.

Personal history

Appetite was poor. Diet was dominant in *Madhura Rasa* (sweet diet) and intake of junk food. Sleep was regular, bowel was constipated and bladder was frequent.

Astavidha Pariksha

Nadi: Vata Kaphapradhana (80/min).

Akriti: Krish (Thin with mild muscle wasting).

Jihva: Sama (coated suggestive of improper digestion).

Sabda: Kshama (low tone speech).

Mala: Baddha (altered bowel habit).

Sparsa: Ruksha (dry, rough).

Mutra: Bahumutrata (increase frequency of micturition).

Drika: Samanya.

Treatment protocol

- 1. Baluka Swedana for 20 minutes for 30 days.
- 2. Vaitarana Basti For 30 days.

3. Samshamana Aushadha (oral drug for 30 days)

Panchakola Churna – 2 gm with equal water before food twice a day

Yogaraja Guggulu – 2 tab with 20 ml Rasna Saptaka Kwatha after food twice a day

Tab. Shallaki -2 tab with 20 ml Dashmularishta after food twice a day

Three such courses were done with the interval of 15 days.

Criteria for assessment

Subjective Assessment Criteria			
Pain in joints			
No pain	0		
Pain complaints but tolerable	1		
Pain complaints difficult to tolerate and taking analgesic once a day	2		
Intolerable pain and taking analgesics two times a day	3		
Intolerable pain and taking analgesics more than two times in a day	4		
Swelling			
No swelling	0		
Feeling of swelling	1		
Felling of swelling + Heaviness	2		
Apparent swelling	3		
Huge (Synovial effusion) swelling.	4		
Restriction of movement			
No symptoms / Free movement of joint.	0		
Mild restriction of movement	1		
Moderate restriction of movement	2		
Severe restriction of movement	3		
Uable to do movement of joint	4		
Morning Stiffness			
No stiffness	0		
< 15 min.	1		
< 30 min.	2		
< 1 hrs.	3		
> 1 hrs	4		
Grip power and pressing power			
200 mmHg	0		
198 – 120 mmHg	1		
118 – 70 mmHg	2		
<70 mmHg	3		

RESULT

Showing result of assessment before and after treatment.

Subjective Assesment

Clinical Parameters	B.T.	A.T.
Morning stiffness	3	1
Pain in joints	3	1
Swelling in joints	2	0
Restriction in movement	4	2
Grip Strength (Lt & Rt hand)	L-3 R-2	L-2 R-2

OBJECTIVE ASSESSMENT

Test	BT	AT
ESR	48 mm/hr	10 mm/hr
RA factor	Positive (64.6 IU/L)	Negative (13.7 IU/L)
CRP	Positive (14.1 mg/dl)	Negative (07.2 mg/dl)

DISCUSSION

Ama and Vata are the important components in the pathogenesis of Amavata. As no disease occurs without impairment of Agni^[4] the important issue in Chikitsa is Deepana and Amapachana.

Deepana Pachana: As described in Amavata Chikitsa^[5], at the start of the therapy. Deepana-Pachana was done using Panchakola Churna.^[6] It have Katu, Ushna and Vataghna, Deepana-Pachana and Vibandhahara properties. Due to its Deepana-Pachana action, it helps in Aamapachana. Thus is helpful in Samprapti Vighatana.

Shallaki (Boswellia serrata) have anti inflammatory and analgesic property. It increases Dhatvagni by its Tikta Rasa, leading to proper nutrition of Dhatus, whereas improvement of the symptoms of Vata Kshaya is due to Rasayana (immunomodulator) and Bruhaniya prabhava of shallaki. Extract of Boswellia serrata have natural anti-inflammatory activities at sites where chronic inflammation is present by switching off pro-inflammatory cytokines and mediators which initiates the process.

Rasnasaptak Kwath has Sothahara (anti-inflammatory), sheethara and vednashamak (analgesic) & in Nervous system as an analgesic (Uttam Vedanashamak), in digestive system as Aampachan (aid in digestion), shoolprashaman (alleviates intestinal spasms), Rasayan (rejuvenative) properties. Yogaraja Guggulu has the main therapeutic action as Vedana Sthapaka and Sothahara The Ushna Guna of this drug help in bringing back the vitiated Vata into normalcy. Hence this drug has direct action on Ama and Vata, so it gives good relief in the disease Amavata.

Effect of Baluka Sweda

The Svedana (sudation) therapy is considered as prime in the treatment of Vata diseases, due to its Ushna property overcomes the Sheetha property of Vata inturn Sheeta (cold), Shoola (pain) and Sthamba (stiffness) will be relieved. So Baluka Sweda helps in relieving the signs and symptoms of Amavata. Swedana increases Dhatwagni at the level of joint, thereby improving joint function and its mobility. Baluka Sweda is a dry type of Sweda used in Kaphaja disorders as well as in the disease originated out of Ama, especially indicated in Amavata as mentioned in classics and research studies. Being dry in nature it does Pachanakriya i.e. digestion of Ama and it also cleans the micro channels. It also removes stiffness of joints and alleviates the pain. In Amavata Stambha (stiffness), Gaurava (heaviness) and Shula (pain) are the chief symptoms so Swedana gives relief in these symptoms and helpful in the treatment of Amavata. So Swedana is very helpful in the Amavata.

Effect of Vaitarana Basti

The Basti therapy is considered as prime in the treatment of Amavata diseases. As a whole the qualities of Vaitarana Basti can be considered as Laghu, Ruksha, Ushna, Tikshna. Majority of the drugs are having *Vata-Kaphashamak*. Owing to this property, antagonism to Kapha and Ama, Basti help in significant improvement in sign and symptom of disease. The Tikshna Guna of Basti help in overcoming the Srotodushti resulting due to 'Sanga'. Thus help in breaking down the pathogenesis of disease. Saindhava Lavana by its Sukshma and Tikshna properties, it helps to pass the drug molecule in systemic circulation through mucosa. It is helpful for the elimination of waste due to its irritant property. Jaggary along with Saindhava makes homogenous mixture, to form a solution having properties to permeable the water easily. It helps in carrying the drug upto micro-cellular level. In this Basti, Tila Taila mixed with the solution of jaggary and Saindhava help in forming the uniform mixture. Chincha is having Vata-Kaphashamak, Ruksha and Ushana properties. These properties of Chincha make it useful for the disease Amavata. In Vaitarana Basti, the Gomutra is chief content, which owing to its Katu Rasa, Katu Vipaka, Ushna Virya, Laghu, Ruksha and Tikshna Guna pacify the Kapha. It is having Tridoshahara, Agnideepana, Pachana, Srotovishodhana and Vatanulomana properties. Thus Basti Dravya after reaching to large and small intestine get absorbed from intestine, now due to Laghu, Ushna, Tikshna and Ruksha Guna of Vaitarana Basti Dravya, it breaks the obstructions and expels out the morbid

material from all over the body, thus help in breaking down the pathogenesis of disease. [10]

CONCLUSION

On the basis of this single case study it can be concluded that Panchakarma treatments like Vaitarana Basti, Baluka Swedana and Samshamana Aushadha are effective in the management of juvenile idiopathic arthritis and providing moderate relief particularly pain in joints, morning stiffness, range of movement and swelling in joints. Ayurvedic line of management and drugs helps in decreasing the auto antigens and may acts as modifying the immune response to auto antigens. During the study the drugs are safe and can be given for longer duration without any adverse effects.

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